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### CONVERSATION.

CONVERSATION may be carried on successfully by persons who have no idea that it is or may be an art, as clever things are sometimes done without study. But there can be no certainty of good conversation in ordinary circumstances, and amongst ordinary minds, unless certain rules be observed, and certain errors be avoided.

The first and greatest rule unquestionably is, that all must be favourably disposed towards each other, and willing to be pleased. There must be no sullen or uneasy-looking person--no one who evidently thinks he has fallen into unsuitable company, and whose sole aim it is to take care lest his dignity be injuredone whose feelings are of so morose or ascetic a kind that he cannot join without observable pain and hesitation in the playfulness of the scene no matter-offact person, who takes all things literally, and means all things literally, and thinks it as great a crime to thing in jest as to do it in earnest. One of my of these classes of persons is sufficient to mar the enjoyments of a hundred. The matter-of-factish may very well with the matter-of-factish, the more with the morose, the stilted with the stilted; and they should accordingly keep amongst themselves resp tively. But, for what is generally recognised as agreeable conversation, minds exempted from these peculiarities are required.

The ordinary rules of politeness are of course n sary-no rudeness, no offence to each other's selfesteem: on the contrary, much mutual deference is required, in order to keep all the elements of a com pany sweet. Sometimes, however, there is a very turbid kind of conversation, where there is no want of n good breeding. This most frequently arises from there being too great a disposition to speak, and too small a disposition to listen. Too many are eager to get their ideas expressed, or to attract attention; and the consequence is, that nothing is heard but broken snatches and fragments of discourse, in which there is neither profit nor entertainment. No man listens to what another has to say, and then makes a relative or additionally illustrative remark. One may be heard for a minute, or half a minute, but it is with manifest impatience; and the moment he is done, or stops to draw breath, the other plunges in with what he had to say, being something quite of another strain, and referring to another subject. He in his turn is interrupted by a third, with the enunciation of some favourite ideas of his, equally irrelative; and thus conversation becomes no conversation, but a contention for permission to speak a few hurried words, which nobody cares to hear, or takes the trouble to answer. Meanwhile, the modest and weak sit silent and ungratified. The want of regulation is here very st. It would be better to have a president who should allow every body a minute in succession to speak without interruption, than thus to have freedom, and so monstrously to abuse it. The only remedy, as far as meetings by invitation are concerned, is to take ore eager talkers are introduced than are absolutely necessary to prevent conversation from flagging. One to every six or eight persons is the utmost that can be safely allowed.

The danger of introducing politics, or any other notoriously controversial subject, in mixed companies, is so generally acknowledged, that conversation is in little danger—at least in polite circles—from that source. But wranglements nevertheless are apt to arise. Very frequently, the company falls together by the ears in consequence of the starting of some topic in which facts are concerned—with which facts no one chances to be acquainted. For instance, the Caledo-

nian Canal may be spoken of as a very unlucky specu-It cost above a million sterling, and is, after all, so little used, that the dues collected do not pay the current expenses. Some one mentions that the rernment once proposed to abandon it altogether, but found that there would be a greater loss from leaving it to itself, than from keeping it in use. Th fact, we believe, really was so; but it strikes most of company as paradoxical, and presently there commences a keen dispute upon the subject, every man bringing his own ignorance to bear in full charge against the ignorance of his companions. " How can there be any loss from leaving the canal to itself?" cry e who chance to take that side. Some suggest that the proprietors of the adjacent grounds may claims on the government for the keeping up of bridges across it, and that there may be feeders of the canal which require to have outlets provided for them. these are only surmises, not known facts, and they lingly meet with little respect. "The bridges might be taken charge of by the road trustees," thinks one man; "and Loch Ness, at least, if not also Loch Lochy, have natural outlets to the sea," asserts another. "Where, then, can the call for expense be?"
"Perhaps Loch Oich, the central lake, may be kept we remaps Loca Olca, the central lake, may be kept up by locks in an artificial state, so as to endanger Glengarry's grounds, if not duly attended to." "Oh, then, leave the locks open, and the water will run itself off quite harmlessly." "But something else may require to be provided for." "What is it, then?" "Oh, I don't know." The tug of surmised causes and surmised answers goes on, and all is confusion for perhaps half an hour, when a lull at length takes place, through the pure exhaustion of the combatants, or the affair is settled by a bet-supposing the company to be of a sufficiently vulgar kind. Now, all this arguing and wrangling about things which nobody knows any thing unmingled mischief. The tender plant, agreeable and informing conversation, can no more grow in such a field, than garden flowers will grow amid the curricular turmoil of Fleet Street. If people will interest themselves in such matters as whether the 78th regiment has white facings or red, or how many tails the Chancellor's wig has, let them, in the nam of common sense, provide themselves with an almanack or other appropriate book of reference, which, by one or two words in small print, would settle the case in a ment, and save a world of idle talk.

Conversation is often much spoilt through slight inattentions or misapprehensions on the part of a particular member of the company. In the midst of some
interesting narrative or discussion, he suddenly puts
all to a stop, in order that some little perplexity may
be explained, which he could never have fallen into,
if he had been paying a fair degree of attention to what
was going on. Or he has some precious prejudice
jarred upon by something said, or supposed to be said,
and all is at a stand, till he has been, through the united
exertions of a vexed company, re-assured and put at
his ease. Often the most frivolous interruption from
such causes will disconcert the whole strain of the conversation, and spoil the enjoyment of a score of people.

Extreme egotism is often the means of spoiling conversation; but as we have treated this subject by itself, we shall pass it by on the present occasion.

The eager speakers already alluded to are a different class from those who may be called the determinedly loquacious. A thoroughly loquacious man has no idea of any thing but a constant outpouring of talk from his own mouth. If he stops for a moment, he thinks he is not doing his duty to the company; and, anxious that there should be no cause of complaint against him on that score, he rather repeats a sentence, or gives

the same idea in different words, or hums and haws a little, than allow the least pause to take place. notion that any other body can be desirous of saying a word, never enters his head. He would as soon suppose that a beggar was anxious to bestow upon him, as that any one could wish to speak, as long as he himself was willing to save them the trouble. Any attempt to interrupt him is quite hopeless. The only effect of the sound of another voice is to raise the d of his own, so as to drown it. Even to give a slight twist or turn to the flow of his ideas, is scarce possible. When a decided attempt is made to get in a few words, he only says, with an air of offended feelurtesy, "Allow me, sir," or, set off with a tart co "When you are done, sir;" as if he were a man who nobody would allow, on any occasion, to say all he had If, however, he has been permitted to talk on and on incessantly a whole evening, to the complete closing of the mouths of the rest, he goes away with all the benevolent glow of feeling which arises from a gratified faculty, remarking to the gentleman who takes his arm, "What a great deal of pleasant conversation we have had!" and chatters forth all the way home such sentences as, "Excellent fellow, our host," "charming wife," "delightful family altogether," "always make every body so happy."

Another class of spoilers of conversation are the

Another class of spoilers of conversation are the loud talkers or blusterers. They are not numerous, but one is enough to destroy the comfort of thirty people for a whole evening. The least opposition to any of his ideas makes the blusterer rise in his might, and bellow, and roar, and bellow again, till the whole company is in something like the condition of Æneas's fleet after Eolus has done his worst. The society entered by the bind of reasons and the condition of the conditi

joyed by this kind of man is a series of first invitati While blusterers and determinedly loquacious persons are best left to themselves, and while endless worryings on unknown things are to be avoided, it is nec both that one or two good conversationists should be at every party, and that the strain of the conversation should not be allowed to become too tame. In all invited parties, eight of every ten persons are disposed to hold their peace, or to confine themselves to m syllabic answers to commonplace inquiries. It is ne cessary, therefore, that there should be some who can speak, and that fluently, if not entertainingly-only not too many. But all engrossing of conversation, and all turbulence and over-eagerness and egotism, are to be condemned. A very soft and quiet manner has at last been settled upon, in the m circles, as the best for conversation. Perhaps they carry it to a pitch of affectation; but yet, when we ve the injurious consequences of the opposite style in less polite companies, it is not easy to avoid the conclusion that the great folk are, upon the whole, right. In the courtly scene, no one has his ears offended with loud and discordant tones, no one is cond to absolute silence. All display in conversation will not depend on the accidental and external quality of strength of voice, as it must do where a loud and contentious style of talking is allowed: the soft-toned and the weak-lunged will have as good a chance as their more robust neighbours; and it will be possible for all both to speak and to hear. There may be aner advantage in its being likely to produce le mental excitement than the more turbulent kind of ciety. But regulation is, we are persuaded, the ing most of all wanted in the conversational meetings of the middle classes. People interrupt each other too much—are too apt to run away into their wn favourite themes, without caring for the topic of their neighbours—too frequently wrangle about trifles.
The regularity of a debating-society would be intoler-

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able; but some certain degree of method might certainly be introduced with great advantage. should at least be a vigorous enforcement of the rule against more than one speaking at a time, even though none of those waiting for their turn should listen to a word he says. Without this there may be much talk, and even some merriment, but no conversation

# THE COSSACKS, AND PLATOF THEIR ATAMAN.

Amongst the numerous distinct tribes that are enrolled as subjects of the present Russian empire, none have become so interesting to other European powers as the Cossacks. The origin of these people is very indistinctly traced, but as far as can be judged with any certainty, they are fundamentally a Slavonic race, which, by intermixture with different tribes, chiefly of Tartars, became distinguished for the qualities which such a descent was likely to units. Thus the Cossacks have partaken of the characteristics of a settled agriaral people, and of a nomade tribe addicted to lunder and rapine. The severe restraint of laws they have at all times repudiated, but have been found capable of receiving a certain discipline, which has rendered them of great importance in a military point of

The Cossacks have been divided, in more recent times, into two great families, the first and most impor-tant of which is the Cossacks of the Don. These were, eriginally, a branch of the Cossacks of the Ukraine from whom they separated in the middle of the seven oth century, when they settled themselves on th banks of the Tanaïs or Don. From them have sprung those scattered portions of the great family of Cossack those scattered portions of the great family of Cossacks which are found on the banks of the Wolga, on the Ural mountains, and throughout the desolate wastes of Siberia, where they form a species of militia admirably adapted for curbing the barbarous hordes which, beyond the research of history, have wandered in that extensive region of Asia. The second great division of the Cossacks has had a variety of fortune, and has occupied far-separated territories. The Ukraine, has occupied far-separated territories. The Ukraine, which now forms a well-cultivated and fertile province of Russia, was formerly an independent territory, sur-rounded by the three great rival powers of Russia, Poland, and Turkey. It was inhabited by Cossacks, and seems to have formed the first settled abode they rounded by the three great rival powers of Russia, Poland, and Turkey. It was inhabited by Cossacks, and seems to have formed the first settled abode they ever possessed. Their country stretched three hundred miles in length, and was divided into two nearly equal portions by the Borysthenes or Dnieper, in its course from the north-west to the south-east. In the morthern part some attention was paid to agriculture; but the southern, exposed to perpetual inroads from the Krim and Little Tartars, was sbandoned to its native forests and marshes. The Cossacks enjoyed the privileges of an independent people, though always under the protection or subjection of one of their powerful neighbours. They exercised the right of choosing their own Chiefs or Atamans, the last of whom, selected by themselves, was Maseppa, whose name has become so famous both in Freuch and English literature. After the part he and the Cossacks took in favour of Charles XII, when he advanced through the Ukraine to Pultava in the year 1709, Peter the Great annihilated them as a people, by putting most of them to the sword, and carrying off the remnant to the site of St Petersburg, where they periahed as labourers in the erection of that city. But although the great parent stock of the Cossacks was thus roughly handled, a tribe of them, which had gradually formed to the eastward of the Ukraine, was not then involved in their fate. This tribe, which formed one of the most singular communities ever known on the face of the earth, was composed of outeasts from all quarters, as well as from the Ukraine, and was distinguished as the Zaparoghian Cossacks or the Cossacks who resided beyond the cutaracts of the Dnieper. These ruffians scorned all industry, and every avocation except plundering; and in order to render their minds yet more reckless, they did not permit any women to live amongst them. To recruit their numbers, they carried off the male children of their neighbours, and reared them in their own audacious and vagabond life. These Zaparoghian Co

But it is the Don Cossacks that have rendered th But it is the Den Cossacks that have rendered themselves so famous in the annals of European warfare and have attracted the principal attention. These people occupy a territory stretching along the Don which contains nearly three thousand geographics square miles, and their numbers amount to about two hundred and fifty thousand. Although subject to the Russian empire, they enjoy certain privileges, which which contains nearly three thousand geographical square miles, and their numbers amount to about two hundred and fifty thousand. Although subject to the Russian empire, they enjoy certain privileges, which render them in some degree independent. They are not subject to any tax, but, holding their lands by a military tenure, are compelled to furnish troops, and to maintain them at their own expense, except when called into foreign countries. Their municipal government partakes of the spirit of freedom, as they nominate the magistrates of each stanits or district into which the country is divided, who are styled Atamans. These officers are subject to the head Ataman, who is appointed by the emperor, and whose jurisdiction over the Cossacks is both of a civil and military nature. The residence of this superier officer is at Novo-Tcherkask, not far from the banks of the Don, which town is the capital of the country. The occupations of the Cossacks in time of peace are tending their flocks, the pursuits of agriculture and of fishing, and the making of wine, which enjoys a high reputation in the south of Russia. Their manners and customs are those of a half-civilised people, being distinguished for their hospitality and kindness to strangers, in the midst of a rudeness and barbarism which they derive equally from their descent, and from the hardy and warlike life to which they are from infancy inured. Skill in horsemanship and in the use of arms, is looked upon as the chief accomplishment of a Cossack; and as each of the nation, however humble his origin, may aspire to the rank even of chief Ataman, the ambittion of every one is fired, to distinguish himself for his brilliant qualities as a warrior. For, although he can in quiet times submit to the uniformity of a pastoral and rural life, the first summons to arms is obeyed with joy, and he leaves his home without a pang, and full of ardent anticipations for those scenes of blood and licence for which he has from boyhood panted, and in which alone he can raise himse

he can raise himself to distinction and command.

The manners of such a people as the Don Cossacks receive a better illustration by taking the life of an individual amongst them, than by dilating on general characteristics. For this purpose the career of Platof, whose name occurs so often in the campaigns which preceded the downfall of Napoleon, at once presents itself, both in reference to the Cossacks, and as a distinguished historical character. Out of the ample details collected by his Russian biographer Mr Smirnoi, a few particulars can scarcely fail to interest the general reader.

tinguished historical character. Out of the ample details collected by his Russian biographer Mr Smirnoi, a few particulars can scarcely fail to interest the general reader.

Matvei Platof was born on the 6th August 1751, on the banks of the Don. His father was a major in the army of the Cossacks, but at the time of his birth was engaged as a fisherman on that river. According to old Platof's account, and to the statements still repeated amongst the Cossacks, several prodigies accompanied his birth, which it is not necessary to particularise. The literary education of the boy did not extend beyond teaching him to read, but in those exercises which qualify the mind and body for hardhood in war, he was indefatigably trained, and from an early age he surpassed his companions both in intepidity and adroitness. The lessons of his father taught him not only to excel in the management of a horse, and in the celerity with which he executed the evolutions of a Cossack soldier, but also to exhibit the patience and alacrity requisite to gain the esteem of his superior officers, so that, learning the esteem of his superior officers, so that, learning the esteem of his superior officers, so that, learning the esteem of his superior officers, so that, learning the esteem of his fellows, that he early attracted notice, and was not long in receiving the rank of officer. The attentions bestowed upon him by his superiors, stimulated the strong natural talents of the youth; and he is stated, even at this premature age, to have evinced great eagerness of observation, and for storing up remarks calculated to widen the extent of his information. The intercourse he enjoyed with those older than himself, taught him also the value of acquiring knowledge by books; and such histories of times past as the limited stores of Tcherkask could afford him, he perused and pondered over. It is to be regretted, that a mind se capable of enlightenment should not have had access to better and more varied compiliations, for with such opportunities Pl

at services. He served under Suwarof at the siege

great services. He served under Suwarof at the siege of Issuail; and before the termination of the war, his distinguished merits as a warrior obtained him the personal approbation of the empress. His next career was in Georgia, against the Persians; and his fame as a leader became so conspicuous and established, that in the year 1801, Alexander granted him the dignity of chief Ataman of the Don Cossacks, to the prejudice of several efficers much older than himself.

In the wars which subsequently occurred between Russia and France, Platof and his Cossacks first became known to Europe. As an irregular cavalry, perhaps no body of men was ever more calculated to annoy and harass an enemy. Their restless activity, the quickness with which they attack, retreat, wheel round, and return to the charge, the novelty and ferocity of their appearance, their desperate and headlong bravery, all united to render the Cossacks the most feared of all the troops in the Russian service. As skirmishers to cut off stragglers, to intercept supplies, and to attack foraging parties, they are peculiarly adapted, and thus become to a hostile army a fearful scourge. Always hovering around, the enemy is kept in perpetual watchfulness, anticipating an attack, yet ignorant where it will be made. Even in the campaign of 1807, so unfavourable to Russia, the Cossacks under Plutof did dreadful execution amongst the French, and took a great number of prisoners of high rank. After the peace of Tilait, as a soldier's merit is estimated by his sovereign according to the injury he can inflict upon his enemies, Platof was loaded with honours and caresses by the Emperor Alexander, and the King and Queen of Prussia. Napoleon, himself, presented him with a gold snuff-box, set with diamonds, which Platof received with reluctance, as his emmity against that individual even in peace was unquenchable.

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In the ever memorable campaign which was marked by the capture of Moscow and the destruction of the French army, Platof bore a very distinguished part. It was a war in which the peculiar tactics of the Cosacks were of essential importance. In the pursuit of a flying and distressed foe, they are singularly adroit and energetic. Wherever they appeared, death and destruction marked their track. Although little quarter was extended to the unfortunate French in their melancholy retreat, the number of prisoners taken by Platof's squadrons alone amounted to forty thousand. The extermination of the magnificent army with which Napoleon had entered Russia, was followed by the occupation of Paris. In the battles preceding that consummation, Platof was engaged; and so destructive were his attacks on the French, that the very name of a Cosack struck terror into their ranks.

After the overthrow of the man against whom Europe had arisen, Platof reaped an abundant harvest of glory. In company with the allied sovereigns, he visited England, where he was considered by far the greatest "lion" of the time. Crowds flocked to behold the wonderful warrior who had sprung from the confines of Europe and Asia to hurl the redoubted Napoleon from his throne. Actors turned his name to good account, for if he were advertised to be present, the theatre was sure to be filled to overflowing. The shop windows were filled with his portraits; and wherever he appeared, the vociferous huzzas of the multitude attended him. The enthusiastic reception he met with from the Prince Regent and people of England, excited the deepest emotions in the breast of the old soldier; and to the day of his death he never spoke of the British nation without expressions of the sincerest esteem and admiration.

Upon his return to Russia, Platof was made a count of the swine and admiration.

spoke of the British nation without expressions of the sincerest esteem and admiration.

Upon his return to Russia, Platof was made a count of the empire, and received some of the principal orders of that country. He then retired to the place of his nativity, from which he did not again move. After all the dangers he had run, and the fame he had gained, he settled down upon the banks of the river that had witnessed his birth, and devoted himself to the interests of his country was a made a had a made of the country of the second second

settled down upon the banks of the river that had witnessed his birth, and devoted himself to the interests of his countrymen in peace, as he had rendered their name renowned in war. He founded the new capital of the Don Cossacks, Novo-Toberkask, to the erection and prosperity of which he consecrated all his endeavours. He introduced various improvements in the civil administration of the Cossacks, and also into their military organisation. He established a branch of the Bible Society in Toherkask, and also the first printing-press that was ever known amongst his countrymen. Although it may be most reasonably concluded that Platof was convinced of the benefits a more extended civilisation produces in communities, he was, nevertheless, morbidly anxious that his Cossacks should not change their manners and customs. His exhortations to that effect were numerous and energetic, and when a proposition was made to alter part of their usual costume, he opposed it as the first step leading to innovation. He himself, in the midst of the most brilliant society, and amongst the most polite of modern nations, always remained a Cossack, and never for a moment lost his nationality. His mind was deeply imbued with a sense of religion, and of loyalty to the Russian emperor. Insamuch as his religion partook of superstition, so did his loyalty border on abjectness. It is a curious phenomenon, and yet one by no means unexampled, that the rudest, the most merciless and unsparing of soldiers, should have his feelings devoted to a religion whose precepts are those of mercy, peace, and good-will.

Platof died on the 3d of January 1818. He left very little property. The semesors had given him terminates.

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Incomposed the bulk of his estate. Is is believed he was the first of the Cossacks who possessed slaves, though the practice has now become common amongst the richest of them. His descendants still reside in Novo-Tcherkask, and at the farm of Mishkin, which Platof himself possessed. His name is venerated amongst the Cossacks to the present hour, and his sayings and actions are repeated with an enthusiasm which truly marks the depth of their feelings towards him.

thusiasm which truly marks the depth of their seeings towards him.

The Cossacks have within a year received a new Ataman, in the person of Alexander, the heir-apparent of the Russian throne. His nomination is a sufficient proof of the high consideration in which this people are held at the imperial court.

### CHRISTIAN NIMMO.

AN EDINBURGH FIRESIDE STORY.

In the grounds immediately surrounding the anci and ruinous Castle of Corstorphine, long the seat of the noble family of Forrester, and situated a little to the west of the capital of Scotland, there stands an old pigeon-house, with a tree, also of great age, at the distance of a few yards from it. At this day superstition has in a great measure lost its hold of the mind even of the peasantry of the land, yet not many year have passed away since the villagers of Corstory within sight of whose cottages the scene lies, could not turn their eyes after nightfall towards that pigeon-house and tree without feelings of awe and dismay. For there (they averred) was to be seen on moonlight nights the figure of a woman clothed in a white gar-ment specked with drops of blood, and carrying in her hand a sword dripping with gore. Round the tree and dorecot (said the tradition) she wandered hour after hour, weeping and wailing continually, from the setting in of night till cock-crow.

This superstition had its foundation in a lan tragedy, which actually took place on that spot, in the latter part of the seventeenth century. The family of Forrester was of great antiquity, and derived their name from the first of their house having been forester or keeper of forests to one of the early Scottish kings, as the hunting-horns indicate, which form the arm bearings of the family. Sir Adam Forrester, a wealthy burgess of Edinburgh in the fourteenth century, was the founder of this line of the Forresters, or, at least, the first of the name who held the lands of Corstor-phine. The tenth baron in direct descent from him was George Forrester, who was first created a barone by Charles the First, and afterwards, in the year 1633, was advanced to the peerage by the style of Lord Forrester of Corstorphine. This nobleman had five daughters, the fourth of whom, the Honourable Joanna Forrester, was married to James Baillie, eldest son of General W. Baillie of Torwoodhead. Having no male issue, Lord Forrester, before his death, got a new charter from the king, by which the peerage was devised to James Baillie and his heirs by Joanna Forrester, and on the same parties was settled the Corstorphine estate. Why the three elder daughters, who were all of them well married, were passe in this manner, it would be difficult now to discover; but the circumstance was probably not without its influence, as will be seen, in producing the melanchic catastrophe, to the elucidation of which these gene

logical particulars are necessary preliminaries.

On the death of the first Lord Forrester, Jam Baillie, according to the terms of the patent men banne, according to the terms of the patent men-tioned, took the name of Forrester, and succeeded to the peerage, in the year 1654. His lady, Joanna For-rester, brought him one son, who died in infancy, and was followed to the grave soon afterwards by his mother. Lord Forrester married, as his second wife, a daughter of the Earl of Forth, but was again left a widower, afterseveral children, who took their mother's name of Ruthven, had been born to him. Lord Forrester was not more than forty years of age when his second lady died, and it was subsequently to that event that he formed the unhappy and criminal connection which is the main object of our present

In the days to which we allude, many of the mer chants of Edinburgh were cadetsor youngersons of good families, and history tells us that the civic honours of the city were then not despised by the landed gentry around. Intermarriages, also, were more common b tween the more respectable portions of the mercantile order and the families of the landed gentry. There is no use for marvel, therefore, when we find a grandaughter of the first Lord Forrester married to a merchant of Edinburgh. The name of that merchant was James Nimmo, and his wife's name Christian Hamilton, a daughter of Hamilton of Grange by the Honourable

Mary Forrester, third daughter of the first Lord Forrester, and one of those children who were passed over by the deed of entail. Christian Hamilton or Nimmo was a woman of great beauty, but of a haughty disposition and violent temper. Though the wife of a merchant, she appears to have been proud of her birth, and, in particular, of her relationship to the noble family of Corstorphine. From the close neighbourhood of the seat of the Forresters to Edinburgh, Lord Forrester was frequently in the city, even when it was not the season for the residence of the nobility and gentry in their town mansions. Hence it was that habits of intercourse sprang up between Lord Forrester and the family of James Nimmo. His lordship, as has been said, was still far from being old when left a widower a second time, and, unfortunately, he was struck with the youthful bloom and beauty of the wife of Nimmo. Her relationship to him (maritally or in law, though not in blood) as the niece of his first lady, did not deter Lord Forrester from encouraging the growth of such a passion, and the opportunities which that very relationship gave him of visiting the house of Nimmo, were ere long productive of the dishonour of the merchant's wife. From the after conduct of Christian Nimmo, it is to be feared that her mind was a stranger to the feelings which might have averted this disgrace.

This gruph is the conduct of the mumber of Mary Forrester, third daughter of the first Lord For-rester, and one of those children who were passed over

This guilty intercou rse continued for a numb years, and appears, as is not uncommon in such cases, to have become ultimately almost open and undisquised. No divorce, however, took place between Nimmo and his wife, although on the part of Lord Forrester such an event was anticipated, and at one time even wished for. His lardship had been noted as one even wished for. His lardship had been noted as one of the supporters of the Presbyterian party; yet, strange to say, he had applied for and obtained, there is good reason to believe, a dispensation from the Pope to marry Mrs Nimmo—after a divorce, of course, should have taken place. One can scarcely conceive of any other terms upon which such a dispensation can have been procured or could be useful, except upon the condition of his lordship becoming a Catholic, and giving his influence to that cause. But ties such as that existing between Lord Forrester and Mrs Nimmo are seldom permitted to have even the appearance of a happy issue. Based upon one unregulated passion, they excite and nourish others of even a worse nature. So was it in this case.

On the morning of the 26th of August 1679, Mrs

dom permitted to have even the appearance of a happy issue. Based upon one unregulated passion, they excite and nourish others of even a worse nature. So was it in this case.

On the morning of the 26th of August 1679, Mrs Nimmo left Edinburgh, attended by her serving-woman, to visit Corstorphine Castle. On reaching the castle, where her presence was but too familiar a spectacle, Mrs Nimmo found that his lordship was not at home; but on making inquiry, she learnt that he was at the inn of the village, and had been drinking there since an early hour. She sent for him, and he came at her request. They entered together the garden of Corstorphine Castle, and walked in it for some time. It is believed that the divorce and dispensation formed the subject of the lady's discourse, and that she wehemently pressed his lordship to set on foot the process of separation, and to fulfil his purpose of making her his wife, which (the proud woman thought) her descent from an elder sister of the late Baroness Forrester rendered little less than her due. Excited by the liquor he had taken, and irritated by the violence of her reproaches, Lord Forrester answered her with bitterness and violence equal to her own. The altercation grew more and more angry in its tone, and at length his lordship applied a name to Mrs Nimmo, the most degrading that can be used to one of her sex. The miserable woman could not say with the innocent Desdemona, "Am I that name which he did call me?" But the string was not the less severe from being merited, and fell with tenfold force when coming from the lips of him who had been in some measure the cause of her meriting the epithet. All the fiery passions of Christian Nimmo's nature were aroused. In the revengeful madness of the moment, she anatched at the sword which hung by his lordship's side, pulled it from the scabbard, and in an instant stabed him through the body. Lord Forrester did not fall with the blow, but the enraged woman repeated it, and he dropped to the ground. He did almost immediately. T

and beheld a hole in the floor above. It immediately struck this person that the slipper had fallen through, and that the object of their search would be in the garret above. That conjecture was correct. Being garret above. That conjecture was correct. Being rotten, and long untroden, the floor of the garret had given way under Nimmo's foot, and though she had retracted the foot, the slipper had fallen into the room below. The unhappy creature was dragged from her concealment, and the ministers of justice being made acquainted with what had occurred, she was taken to Edinburgh, and lodged, before the sun went down that had witnessed her crime, in the Tolbooth of the city, or, to give it its more famous name, the Heart of Mid-Lothian.

It may wall be

city, or, to give it its more famous name, the Heart of Mid-Lothian.

It may well be supposed that the rank and station of the victim of this dreadful act, as well as the relationship of the parties, and the unhappy circumstances in which they stood with regard to each other, caused the affair to make an extraordinary impression on the public mind. On the second day after the deed (the 28th of August), Christian Nimmo was examined by the sheriffs of Edinburgh. "She confessed the fact," says Lord Fountainhall in his Decisions, "but pretended that she was provoked thereto, because he (Lord Forrester) in his drink had abused her with the vilest terms of reproach." She retained complete presence of mind, and made "a long discourse of the circumstances and manner of the act, seeking to palliate and extenuate it." The tenor of her statement was, that it was well known that Lord Forrester, when under the influence of drink, was very furious; that he was so on this occasion; that he drew his sword and ran at her with it; that she took it from him to preserve herself from hazard; and that he ran in his blind fury upon the sword's point, and thereby gave himself the mortal injury whereof he died.

The three witnesses (two men, and Christian Nimmo's own woman) proved this statement to be totally

it; that she took it from him to preserve herself from hazard; and that he ran in his blind fury upon the sword's point, and thereby gave himself the mortal injury whereof he died.

The three witnesses (two men, and Christian Nimmo's own woman) proved this statement to be totally false. They had seen her draw the sword with her own hands from his lordship's side, and stab him with it. Moreover, one woundenly would have been inflicted, in all likelihood, had the matter occurred as described by her, whereas several wounds appeared on his lordship's body, showing the furious passion by which the murderess had been actuated. This plea failing, therefore, Christian Nimmo, though she held obatinately to the last by the same assertions, betook herself also to other schemes for averting the consequences of her act. She declared herself likely to become a mother; but a medical commission, which was thereupon appointed, depende, to the best of their judgment, that no signs existed of this averment being true. It was accordingly regarded as a "mere shift to procure delay." Before the fate of Christian Nimmo was decided by the courts of the period, she made another attempt to evade justice, and was to a certain extent successful. Having been supplied by some of her emissaries with man's apparel, she contrived to make her escape in that dress from the Tolbooth, on the 29th of September, about five o'clock at night, in "the gloaming." Her intention was to cross the English border, and she bent her course in that direction. Being on foot, however, she was able only to reach Fala-mill, about fifteen miles from Edinburgh, on the night of her escape. She remained here till the morning, and, before she could resume her flight, was taken by the officers of justice, who had discovered her route, and followed closely on her footsteps. Tradition says that she was aware of their approach before they seized her, and that she fled, and might possibly have escaped through her great bodily actitivity, had not a man, from mere wantonness,

tian Nimmo.

In the closet of Lord Forrester, after his decease, was found the dispensation from the Pope already alluded to, if we may trust to the authority of a work called "Popery and Schism equally dangerous in the Church of England." In closing his account of this striking case, Lord Fountainhall notices that the females of the house of Grange appear to have been of a peculiarly unhappy temperament in other instances than this. Christian Nimmo's "cusing germane, Mrs Bedford," murdered her husband under circumstances of great aggravation, "and they say that the Ladie Warriston, who about one hundred years ago strangled her husband Kincaid of Warriston, was of the same family."

Such is the story of the Pigeon-house and Old Tree

of Corstorphine, and such the basis of the superstitior relative to the white lady, said to wander and wail be moonlight with the bloody sword in her hand, aroun the scene of her guilt. The whole connection betwee Lord Forrester and Christian Nimmo was indeed pecu-Lord Forrester and Christian Nimmo was indeed peculiarly criminal, since she was (to use again the words of Fountainhall) "my lord's first lady's niece; so that the visible judgment of God may be read both upon her and him." The family of Forrester of Corstorphine was not continued through this unhappy lord, but through William Baillie, his brother, who married the fifth daughter of the first Lord Forrester, and succeeded, by the terms of entail, to the title and estates. His descendant by the female side is now Lord Forrester of Corstorphine, being at the same time Viscount Grimston in the Irish and Earl Verulam in the British peerage. in the British peerage.

# INCOMBUSTIBILITY OF THE HUMAN BODY.

INCOMBUSTIBILITY OF THE HUMAN BODY.

BOTH in ancient and modern times, numerous instances have been recorded of seeming insensibility on the part of individual human beings to the action of five or intense heat. The Roman poet Virgil relates that the priests of the temple of Apollo, on Mount Soracte, had the faculty of walking with naked feet over burning coals, and the priests of other temples in Rome used to attract great crowds by a similar peculiarity. In more modern days, when the ordeal by fire was a common and approved mode of determining the truth or falsity of weighty accusations, many instances are related where persons lifted and also walked over red-hot iron bars, or put red-hot iron gauntlets on their hands, without suffering from such trials in the slightest degree. Admitting many of these stories to be fictitious, the weight of evidence is too strong for us to disbelieve all of them. Those cases seem most likely to be true where individuals offered, of their own accord, to undergo the fire-ordeal, in order to prove the justice of some charge or other. Thus, when the Empress Maria of Arragon had accused a young Italian count of endeavouring to tamper with her nuptial faith, and had so procured the death of the count, the widow of the deceased came forward and demanded to be admitted to the fiery ordeal, in order to prove his innocence. Her demand was acceded to, and on her holding in her hand a red-hot bar of iron for a considerable length of time without being burned, the empress was held to be guilty of a false charge, and was condemned to death in her turn.

Such cases were at the time deemed miraculous; but as the minds of men became more enlightened, there appearance of some itinerant exhibitor, whose person, in part or whole, evinced the power of enduring the action of fire was referable to natural and intelligible causes. Within the last two hundred years, every half century or so has been marked by the appearance of some itinerant exhibitor, whose person, in part or whole, evinced the powe

question to which we shall refer alterwards, when we have described some of the feats of this remarkable class of persons.

In Paris, about the year 1677, an Englishman of the name of Richardson attracted great attention by his performances with fire. He professed himself able to execute the following feats. He chewed live coals, and showed them burning in his mouth; he melted sulphur, let it burn on his hand, put it, while in flames, on his tongue, and finally swallowed it; he put a burning coal on his tongue, cooked there a piece of raw flesh, and allowed the fire to be kept up with a pair of bellows for a quarter of an hour; he held a red-hot iron bar in his hands, and afterwards took it into his mouth, from which he threw it forcibly with his teeth; and, lastly, he swallowed melted glass and pitch, sulphur and wax melted together, and in flames, so that the flame came out of his mouth, and the mixture made as much noise in his throat as if a hot iron were plunged in water. Such, according to his own announcement, is the list of Richardson's performances; all of which he successfully executed, at least in seeming, since a French academician made an attempt to explain his feats on rational principles. The general opinion was, that the exhibitor was protected by a particular composition, which he rubbed over the parts exposed to the fire. Others thought that habit did a great deal in the matter, while the vulgar openly ascribed the whole to a compact with the devil.

About the middle of the eighteenth century, a Mr Powell acquired great note on account of his fire-feats, and appears to have excited so much astonishment among the scientific men of London, as to be thought worthy of a medal from the Royal Society. Among his successors in the art was an individual named Lionetto, who exhibited in Paris and Naples. Since that time, feats with live coals, the ejection of flames and smoke from the mouth, &c. have become more and more common, and may be seen practised to a greater or less extent at almost every fair.

largely indebted on the present occasion, appeared in one of the later volumes of the (Constable's) Edinburgh Magazine, descriptive of the performances of Signora Girardelli, and investigating thoroughly the means by which abe accomplished them. We cannot better elucidate any mystery that may hang over this subject, than by an account of the conclusions to which the writer of the article in question came to respecting the feats of Signora was a pleasant-looking lady, above

feats of Signora Girardelli.

The Signora was a pleasant-looking lady, above forty years of age. She seemed most anxious to satisfy her visitors of her fair performance of every thing she undertook, and to eradicate all suspicion of juggling and mystery. Her feats were of five kinds; 1st, those with aqua fortis (nitric acid); 2d, those with boiling oil and melted wax; 3d, those with melted metal; 4th, those with hot metals; and, 5th, those with lighted candles. Her experiments with aqua fortis were as follows: She took a little aqua fortis into her mouth, and, after holding it there a little, spat it out on some iron filings, in order to exhibit its strength by the orange fumes which were raised. She put some aqua fortis on a plate, and put a halfpenny into it, on which it acted briskly; she then rubbed about the halfpenny till it was scoured bright. She put a halfpenny into it acted briskly; she then rubbed about the nairpenny till it was seoured bright. She put a halfpenny into the palm of her hand, and poured a little aqua fortis upon it, and allowed them to act upon each other there a considerable time. Her hand was not at all discoloured by these experiments. When examined the palm of her hand, and poured a little aqua fortis upon it, and allowed them to act upon each other there a considerable time. Her hand was not at all discoloured by these experiments. When examined into, these feats with aqua fortis do not appear very wonderful. The action of the acid on the copper was no proof of great strength, and it was the only proof given. When the writer of the account afterwards tried the same experiments, he found that diluted aqua fortis, which had more action on copper than in the Signora's experiment, could be taken into the hand without discolouring it, and into the mouth without any other effect than that of setting the teeth on edge, and causing a flow of saliva. The fumes and the seeming causticity of the liquid, therefore, were deceptive, and the want of knowledge in the spectators was the true cause of their wonder. The experiments with boiling oil and melted wax were performed thus: "The Signora filled a small pan with Florence oil, boiled it, proved that it was boiling by coagulating the white of an egg in it, and then took a mouthful of the oil, which, after rinsing her mouth, she spat out into the brazier, to show, by its blazing, that it was really oil." As the boiling point of oil is 600 degrees Fahrenheit, this would certainly appear a remarkable experiment. But our analyst observes that there was no proof that the oil was pure. A little water mixed with it would cause the appearance of chullition at 212 degrees. The liquid, even in this case, would be very warm, but a great part of the wonder would be taken away. "The Signora applied melted sealing-wax to her tongue, and an impression of a seal was taken on it." The same experiment was afterwards ventured upon by the writer of the account, and he found that he could bear it without suffering more than a very transient impression of heat. The wax, it is to be observed, was not dropt on the Signora's tongue, but torn off from the stick with the seal. wax, it is to be observed, was not dropt on the Signora's tongue, but torn off from the stick with the seal. The saliva on the tongue, and the slow-conducting power of the wax, seem to preserve from injury in this

power of the wax, seem to preserve from injury in this case.

In none of these experiments, then, which are among the common ones performed by the fire-eaters, is there any very great cause for wonder, when properly examined into. With regard to the feats with melted metal, the first was as follows: "The Signora dipped the point of her fingers repeatedly into melted lead, and at each time lifted a small portion to her mouth, spitting it out afterwards in thin chewed masses. Again, she poured a small quantity of melted lead into her mouth, and afterwards took from her mouth a chewed piece about the size of a drachm. Her last feat with melted lead was to strike repeatedly with the sole of her foot a considerable piece of the metal when it was barely congealed." As plumbers are quite accustomed to touch or draw the finger through melted lead without sustaining injury, there is a perfect possibility of explaining the Signora's power of touching the metal with her finger and foot, upon the supposition that, like the plumbers, she was accustomed to it. But the introduction of the melted lead into her mouth is certainly a feat of a more extraordinary kind. The writer of the account already mentioned could see no juggle on the part of the lady, and considers the experiment as the most striking of all she went through.

The next feats were with red-hot iron. "The edge of a shovel in that condition which set wood on fire.

all she went through.

The next feats were with red-hot iron. "The edge of a shovel in that condition which set wood on fire, was drawn by the lady along the upper part of her foot and front of her ancle, over her arms also, and hair, without making any mark, or raising any smell or smoke! The shovel was never allowed to rest any sensible time on one spot. Another red-hot shovel was laid on a board, which it set fire to, and the Signora struck it repeatedly with the sole of each foot until it was a little bent. The contact here was momentary. She also licked the red-hot shovel with her tongue, and a hissing noise was heard, as the spectators were taught to expect." Of these experiments, certainly the most remarkable were those made on the hands and arms, where the surface is dry. As for the tongue, it is distinctly understood that the saliva prevents the iron, when rapidly passed over it, from touching the cuticle. It is a curious fact, that if the

iron be at a black heat, the tongue will be burnt in such experiments, though uninjured at a red heat. The insensibility of the dry arm and leg is, as we have said, the most remarkable point in the Signora's feats with the heated iron. It was observed, however, that she used the edge of the shovel alone, and that this edge had previously been cooled in some degree by setting fire to the wood. "The remaining feats of the lady consisted of passing a bundle of eight lighted (moulded and wax) candles slowly and steadily beneath each fore-arm, and also moving her foot over the flame in such a way as to show the light rising between her toes. This process blackened the parts with smoke, but affected them in no other way."

This feat indisputably showed great insensibility to between her toes. This process blackened the parts with smoke, but affected them in no other way." This feat indisputably showed great insensibility to the effects of heat. Much seemed to depend upon the steady movement of the flame, an effect analogous to which is seen in the singeing of muslin, where the loose threads are burnt away by being passed over a red-hot cylinder.

expense of the transfer of the

red-hot cylinder.

These are the chief performances of one of the most dexterous and celebrated of the modern fire-esters, as they are generally named. The conclusion to be drawn from the preceding analysis is, that, while every art was used by the Signora Girardelli to increase the ostensible magnitude and difficulty of the experiments, on the other hand, every art was put in force to diminish their real difficulty. But, upon the whole, a remarkable power of resisting heat was fairly shown to be possessed by the Signora. On being questioned, she declared herself to be in possession of a secret composition on which the insensibility of her skin depended; but there is reason to think that she only found this a convenient way of answering such interrogatories. She asserted that she was able to remain in an oven while a leg of mutton was roasted. This tound this a convenient way of answering such interrogatories. She asserted that she was able to remain in an oven while a leg of mutton was roasted. This feat could not depend on a composition, for it would be difficult, indeed, to apply any thing of the sort to the membrane lining the lungs. Besides, there was no melting or evaporation on the application of the hot iron to her skin, which would most probably have been the case had any composition been rubbed over it. Her tongue, also, was perfectly red and clean. In short, after the minutest examination, the writer we have quoted arrived at the conclusion, that the Signora derived her insensibility to heat from some peculiarity of constitution, increased by repetition and habit, and a great dexterity in making her experiments. That there are constitutional differences between human beings in this respect, must have been observed by every one. Some persons cannot lift off a kettle filled with boiling water from the fire, while others can lift out a piece of live coal with their fingers. The power which laundresses acquire of handling hot irons, is a sufficient example of the influence of habit in obviating the effects of heat.

It is due to candour, however, to say, that some of

It is due to candour, however, to say, that some of the fire-eaters do appear to use a composition for their skin. On observing a quantity of vapour to arise from Lionetto's skin, when touched by red-hot iron, Dr Sementini of Naples became convinced that some Dr Sementini of Naples became convinced that some application to the skin was the cause of its insensibility, and instituted a number of experiments to discover what the application was. He naturally resorted first to acids, and discovered, that, by washing repeatedly with diluted sulphuric, nitric, or muriatic acids, the skin became gradually less sensible to the action of heat, and he was enabled to pass a red-hot iron over it without injury. By accident, he made the further discovery, that hard soap, rubbed over it, increased greatly the power of resistance in the skin. By washing the tongue with dilute sulphuric acid, and afterwards with soap, he found that he could pass a red-hot iron over it with impunity. In short, he acquired, by slow degrees, the power of repeating all Lionetto's experiments. Dr Sementini, in this case, ascribes the whole effect to the applications made. We are inclined to attribute at least an equal share in it to habit or repetition. repetition.

who he effect to the applications made. We are inclined to attribute at least an equal share in it to habit or repetition.

Monsieur Chaubert, or the Fire-King, flourished only a few years ago. He distinguished himself by many feats resembling those of the Signora Girardelli, with the melted lead and red-hot metals. But the particular line in which Monsieur Chaubert shone most highly, was in the endurance of heat in ovens, and such like places. What he could endure in this way was very wonderful, though much of the wonder has been removed by the experiments of Dr Blagden and others, who have proved that the human body retains an equability of temperature under any circumstances. Without previous trials of any kind, Dr Blagden entered a room raised to a heat of 260°, and remained in it, while eggs and a beef-steak were roasted by the atmospheric heat. The steak was overdone in thirty-three minutes. In such a position, the suffering is in the lungs. Experiments of this order were gone through by Chaubert with greater ease than others could do them, and this ease might partly arise from constitution, and partly from repetition and habit. It was unfortunate that this person was not contented with the repute of being fire-king, but wished also to be thought poison-king. He gave out that he was proof against the whole generation of poisons, and made a show of taking the deadly one called prussic acid in public. He even went the length of announcing his readiness to permit any gentleman to bring his own prussic acid, just as jugglers, who allow themselves to be shot at, profess to let any gentleman bring his own gun. Unfortunately for Monsieur Chaubert, Mr Wakley, editor of the Lancet, desirous either of expos-

ing quackery, or of making a curious philosophical experiment, issued a public advertisement, stating that he was about to come forward with a dose of his own prussic acid, in answer to Monsieur Chaubert's call, at the same time warning the fire-king of the consequences, and washing his own hands of all responsibility in the matter. The fire-king, in this instance, did not stand fire. The attention of the public being arrested to the subject, he found it convenient to take leave of London, and has never, to our knowledge, been heard of since. It is possible that he may at this moment be sitting in an oven in the New World, beside a leg of mutton. The worst wish we have to give him, is, that he may have had the foresight to take in a knife and fork with him.

From all that has been said here on this subject, the reader will observe it to be our opinion, that the majority of the feats of these fire-caters (to use their common name) are the result in part of a natural insensibility to heat in the individual, strengthened by long habit, and rendered more effective in display by all the little tricks and deceptions possible. A due degree of boldness and dexterity of hand would enable most people to go through a number of these feats at the first trial; and by practice, in many instances, the power of performing others might apparently be acquired.

#### AMERICAN STEAMERS.

WE obtain some exact and recent inform this subject from a "Sketch of the Civil Engineering of North America,"\* published within the last few weeks, by Mr David Stevenson of Edinburghber, we believe, of a family which has long been distinguished in that department of practical science. Having, as he informs us, heard much to interest and surprise him respecting the engineering works of America, and having been unable to meet with any satisfactory information regarding them, Mr Stevens solved to pay a visit to the United States and Upper and Lower Canada, for the purpose of examining the subject for himself, and communicating as correct a view of it as possible to his countrymen. This handsomely embellished volume is the consequence. describes the harbours, or all that is peculiar in them. the Lake and River Navigation, the Steam Navigation the Canals, Roads, Bridges, Railways, Waterworks, and Light-houses, of a portion of the world where all such works have made perhaps a more rapid advance, and been conducted on a greater scale, than in any other, it cannot, in our opinion, fail to be a work of the profession, but to the much interest, not only to the profession, but to the public at large.

public at large.

Mr Stevenson describes the American steamers as of three kinds, appropriate to the nature of the various waters in which they ply. One class is employed in navigating the eastern rivers and coasts—another in navigating the Mississippi and its branches—and a third in navigating the Canadian lakes. None of these vessels encounter the heavy seas which British coasting steamers have to meet, and consequently a light built and delicate mould characterise all of them, the great object held in view in their construction being speed. Few have masts or sails, or are commanded by men of Few have masts or sails, or are commanded by men of seaman-like character and attainments. Nor, with all

sand deficate module disasteries and them, the great few have masts or sails, or are commanded by men of seaman-like character and attainments. Nor, with all the engineering eminence of America, are there any general principles as yet established for the construction of these vessels. They are all built simply according to the best sense and tact of individuals. When once built, their constructors seldom let them remain long without attempting improvements upon them. It is quite common to saw them through, and insert thirty feet of greater length in the middle. In short, to use Mr Stevenson's words, they are built upon "a persevering system of trial and error."

The steamers plying on the Hudson are of very small draught, on account of the shoals in the upper part of the river. The length of the vessels ranges from about 180 to 235 feet; the breadth of beam from 22 to 28; while the draught is four, five, and six feet—very rarely more. The bottom is flat, and the sides and front perpendicular; a keel of about six inches serves chiefly to strengthen the bottom. In fact, the Hudson steamer is simply a long, narrow, and shallow box, with a sharpened end. The deck, however, is twice the breadth of the beam, in consequence of a projection to cover the wheels. Mr Stevenson describes the Rochester, as a specimen of the class. It is 209 feet 10 inches in length on the deck; 24 feet maximum breadth of beam; breadth of deck 47 feet; when carrying an average number of passengers, four feet. The puddles are of twenty-four feet diameter, when carrying an average number of passengers, four feet. The puddles are of twenty-four feet diameter, when carrying an average number of passengers, four feet. The puddles are of twenty-four feet diameter, when carrying an average number of passengers, four feet. The puddles are of twenty-four feet diameter, when carrying an average number of passengers, four feet in length. The vessel is propelled by one engine; having a cylinder of 43 inches in diameter, and the length of stroke ten feet

the pressure of steam mounts as high as forty-five pounds on the square inch, the piston makes twenty-seven double strokes, and the rim of the paddle-wheel traverses twenty-three and about one-eighth miles an

traverses twenty-three and about one-eighth miles an hour.

The deck of a Hudson steamer is about five feet above the water. The whole space underneath it, behind the engines, forms "the gentlemen's cabin," serving as both an eating and a sleeping room. On the deck another cabin is erected for the ladies, having what is called "the promenade deck" on the top of it, at the height of about sixteen feet above the water. The space in front of the engines is only covered by an awning, and serves for what are called deck passengers. A curious effect in the eyes of strangers is produced by the exposure of the walking-beam of the engine high above the deck, and by the two smokeflues, which all of these vessels have, or the four which are exhibited by a small number of them. In consequence of the building of "the ladies' cabin" upon the latter part of the deck, the steersman has to stand in the centre or near the bows of the vessel, moving the helm by means of a long rope, and chiefly guided in his observations of its course by a tall pole rising sheer up from the bow. Sometimes, in cases of fire, this rope has been burnt, so as to render the vessel unmanageable; and on one occasion a hundred passengers lost their lives in consequence of such an accident. Ingenie; and not one consists a matter passengers lost their lives in consequence of such an accident. To prevent the like catastrophes for the future, chains are becoming generally substituted for ropes. The steamers used on bays and sounds, and along the coasts, are of a somewhat more substantial make,

The steamers used on bays and sounds, and along the coasts, are of a somewhat more substantial make, drawing from five feet six inches to nine feet water. But still Mr Stevenson expresses surprise at the slightness of their structure, the squareness of their form, and the shallow draught. The Narragansett, which plies between New York and Providence, and is consequently exposed for fifty miles of her voyage to the roll of the Atlantic, differs little, as far as we can judge by drawings and measurements, from the less adventurous vessels which ply on the Hudson. "The cabins of the sea-steamers," says Mr Stevenson, "are of great size, and their accommodation for passengers is excelent. In most of them about four hundred berths are provided. The principal cabin in the 'Massachusetts,' a vessel running on the line between New York and Providence, is 160 feet in length, about 22 feet in maximum breadth, and 12 feet in height; and, what adds greatly to its convenience and capacity, it is entirely unbroken by pillars or any other obstruction throughout its whole area. I have dined with 175 persons in this cabin; and notwithstanding this numerous assembly, the tables, which were arranged in two parallel rows extending from one end of the cabin to the other, were far from being fully occupied; the attendance was good, and every thing was conducted with perfect regularity and order. There are 112 fixed berths ranged round this cabin, and about 100 temporary berths can be erected in the middle of the floor. Besides these, there are 60 fixed berths in the ladies' cabin, and several temporary sleeping-places can be erected in tales. The cabin of the 'Massainxed berths ranged round this cabin, and about 100 temporary berths can be erected in the middle of the floor. Besides these, there are 60 fixed berths in the ladies' cabin, and several temporary sleeping-places can be erected in it also. The cabin of the 'Massachusetts' is by no means the largest in the United States; some steamers have cabins upwards of 175 feet in length. Those large saloons are lighted by argand lamps suspended from the ceiling, and their appearance, when brilliantly lighted up and filled with company, is very remarkable. The passengers generally arrange themselves in parties at the numerous small tables (into which the large tables are converted after dinner), and engage in different amusements. The scene resembles much more the coffee-room of some great hotel than the cabin of a floating vessel.' As might be expected from the built of these vessels, their speed is far above any rate of progress as yet recorded on this side of the Atlantic. The distance from New York to Albany is 150 miles; and the average time required for the voyage, setting aside stoppages, is ten hours, being a rate of fifteen miles an hour. At one part of a voyage which Mr Stevenson made between these two places, where the vessel had nothing either in its favour or against it, but merely fair play, the speed was at the rate of above sixteen and a half miles an hour. "A very general opinion prevails in America, in which many persons possessing the best means of information concur, that the fast steamers can be propelled at the rate of eighteen miles an hour in still water—a feat which, it is said, has of late been often performed.

The disturbance created by the passage of the fast

can be propelled at the rate of eighteen miles an hour in still water—a feat which, it is said, has of late been often performed.

The disturbance created by the passage of the fast American steamers through the water, is exceedingly small. The water, at the distance of twelve inches in front of their bows, presents a perfectly smooth and untroubled surface. A thin sheet of spray, composed of small globules of water, from a sixteenth to an eighteenth of an inch in diameter, rises nearly perpendicularly in front of the cut-water to the height of three, and, in some cases which I have observed, as much as four feet, and falls again into the water on each side of the vessel. There is little or no commotion at the stern; and the diverging waves which invariably follow the steamers in this country, and break on the banks of our rivers with considerable violence, are not produced by the fast boats in America. The waves in their wake are very slight, and, as far as I could judge, seem to be nearly parallel; and the marks of the vessel's course cannot be traced to any great distance. These facts are quite in accordance with the result of some of Mr Russell's experiments, by which he was led to conclude that 'the commotion produced

in a fluid by a vessel moving through it, is much greater at velocities less than the velocity of the wave' (which is proportioned to the depth of the water), 'than at velocities which are greater than it.'"

Such is an outline of Mr Stevenson's observations

(which is proportioned to the depth of the water), 
'than at velocities which are greater than it.'"

Such is an outline of Mr Stevenson's observations on the eastern steamers. Those plying on the Mississippi and its tributaries are considerably different. They are less substantially built, less elegantly fitted up, impelled by enginery of a more dangerous kind, and conducted by men of less civilised character, and who have of course much less respect for the safety of passengers. The engines are of the high-pressure kind, worked by steam of great elasticity; but Mr Stevenson thinks that these engines, under good and well-enforced regulations, might be not more dangerous than those of the low-pressure kind. Although the paddle-wheels, as in other cases, are near the centre of these vessels, the boilers and engines are placed very far forward, so as to allow an unusually large space for the cabins. Over the hold of the vessel which is employed to carry heavy goods, a long cabin is erected for the inferior class of passengers; and this, we are told, is often "a scene of filth and wretchedness baffling all description." Over it, is what we may call a second floor or story, divided into two unequal compartments, the sternmost and least being for the ladies, and the foremost and largest for the gentlemen. The walking or promenading ground consists of two narrow galleries respectively surrounding the two tiers of cabins, besides what is called the hurricane deck on the top of the ladies' and gentlemen's cabins, which is often thirty feet above the water. The passage from New Orleans to Pittsburg, 2000 miles, against the stream, is usually executed in fifteen days, and the backward voyage, with the stream, in ten days.

The steamers on the lakes of the St Lawrence, being exposed to much rough weather, are of stronger make, and are furnished with masts and sails. They, however, so much resemble the steamers used in our own seas, that a particular description of them seems unnecessary. Mr Stevenson also enters very larg

been taking place on the "western waters"—accidents, we believe, mainly traceable to the mere spirit of racing in the conductors of steamers, rather than to any thing substantially wrong in the construction of either the boats or the machinery.

POPULAR SKETCHES IN NATURAL HISTORY.

BRITISH ZOOPHYTES. A MOST beautiful work has just issued from the press, entitled, "A History of the British Zoophytes, by George Johnston, M. D." and exhibiting a most comview of this very remarkable class of animals, as existing in Britain and on its shores. In executing his task, Dr Johnston has adopted a somewhat novel arrangement, of which he shows the excellence by contrast. The volume is illustrated by numerous plates and wood-cuts, most of which are engraved from original drawings made by the talented la the author, who is herself the engraver also of fourteen of them. The name of W. H. Lizars on the title-page of them. The name or w. D. Desarts of the remaining is evidence sufficient of the merits of the remaining as well as of the superior style in which engravings, as well as of the superior style in this work is got up. The labours of Dr Johnston afford us an agreeable opportunity of laying before our readers some notices of this interesting order of animals, which was only slightly adverted to in an early number.

early number.

The compound term Zoophytes indicates that union of animal and vegetable characters which forms the most striking feature in the appearance of this order of creatures. This union of characters, however, is only in appearance; for although the plant-like aspect of these aquatic productions rendered their real nature a matter of doubt for the greater part of last century, it is now distinctly ascertained and admitted that they are not of a vegetable, but of a purely animal character. There is little reason for wonder, upon the whole, that the truth should have remained so long undetermined, for the condition in which these aquatic pro-There is little reason for wonder, upon the whole, that the truth should have remained so long undetermined, for the condition in which these aquatic productions are found, is much more like that of vegetables than of animals. Covering the bed of the ocean in all directions, they present the appearance of tiny forests of trees, thickly and elegantly ramified, and that in a manner as various as is exhibited among the plants of the earth. The matter of which these tree-like productions are formed, is usually calcareous, or composed of lime in the shape of a fine kind of limestone. This substance is familiar to the world under the denomination of Coral. Others of these aquatic trees are of a membranous character, while others are horny in consistence, and others resemble cartilage or gristle. So many of them, however, are calcareous, that some inquirers would have them all ascribed to the mineral kingdom, regarding them as mere depositions of the matters held in solution in the sea. This opinion, as well as that which regarded them as simply vegetables of a peculiar kind, fell ultimately to the ground before the progress of science. It was discovered, as

<sup>\*</sup> London, John Weale, Architectural Library, 59, High Holborn, 1838,

has been stated, that these trees of the deep were the work of small animals, of the class called Polypi or Polypes, and which are characterised, generally speaking, by having bodies of a soft, gelatinous (jelly-like), or blubbery consistence, and of a somewhat rounded shape. To the philosophical reader, the nature of these animals will be best explained by abridging Dr Johnston's clear definition: Animals without spines or articulations, soft, irritable, and contractile, without a vascular or separate respiratory or nervous system; mouth circular, central, and surrounded by small thread-like feelers, which are called tentacles, and which act as the grasping instruments or arms of the a vascular or separate respiratory or nervous system; mouth circular, central, and surrounded by small thread-like feelers, which are called tentacles, and which act as the grasping instruments or arms of the Polype; alimentary canal variable; not distinguished by sexes; gemmiparous, or ushered into existence in the shape of globules, or gemmules as they are usually named; and aquatic. These are the general characters of the Polype class, some of which are single and individually perfect animals, although most of them are compound beings, and are congregated and organically connected in greater or less numbers. By this union it is that the tree-like productions, already described, are formed. The hard substance in which the Polypidoms are formed, will be more particularly described in the sequel.

Dr Johnston, as already mentioned, has adonted an are contracted.

amon at at max the tree-like productions, already described, are formed. The hard substance in which the Polypes subsist is called the Polypidom, as being the house of the Polype; and the mode in which these Polypidoms are formed, will be more particularly described in the sequel.

Dr Johnston, as already mentioned, has adopted a new and seemingly excellent classification of the Zoophyte division of the animal kingdom. Where a plant-like aquatie production, such as the Sponge, cannot be discovered to be the work of, or connected with, a Polype, he excludes it from the Zoophyte class, limiting that term to Polypes and their Polypidoms. This arrangement clearly defines the class. Of the Zoophytes thus distinguished, he forms two sub-classes, Radiated Zoophytes, and Molluscan Zoophytes. The characters of these sub-classes are thus described:—The Radiated Zoophytes have a body contractile in every part, and symmetrical; one aperture for receiving food, and expelling its refuse; and are propagated both by globules and by eggs. The Molluscan Zoophytes have a body non-contractile, and non-symmetrical; separate apertures for the reception of food, and expulsion of refuse; and are propagated both by globules and eggs. The Radiated Zoophytes are so named from the star-like disposition of the calcareous matter of their Polypidoms, while the Melluscan Zoophytes are so entitled, because their Polypidoms, unlike those of the preceding class, are living portions of the Polypes they contain, as is the case with the shelled Molluscous animals, of which the Lobster is an example. The Radiated Zoophytes, again, are divided into three orders, the Hydroida (so called from some affinity in their character to those of the many-headed Hydra, a fabulous serpent), the Asteroida (from the star-like marks which distinguish them), and the Heliauthoida (a word which expresses their likeness to certain flowers, as the Anemone and Marygold). The Molluscan class of Zoophytes has but one order, termed the Ascidoida, of which the chief distincti

matters.

One of the most wonderful points in the structure of the Hydra (of which there are several species, varying more or less in figure, and also in colour, some being green, others brown, and others white) is the contractility, already alluded to, of the body and tentacles. The body, when contracted, is sometimes like a knob, and sometimes like a button; and when it assumes the shape of a cylindrical tube, it becomes ten or twelve times longer than before. The tentacles are even more extensible, shooting outfrom a line's breadth to more than eight inches. As muscular fibres cannot be discovered, or even thought to exist, in the soft jelly-like substance of these tentacles, which are hollow or tubular, their extensibility has been conceived

to depend on the emission of water through them from the body, which water may push out the soft material of which they are composed. "The Hydra," says Dr Johnston, "though usually found attached, can nevertheless move from place to place, which it does either by gliding with imperceptible slowness on the base, or by stretching out the body and tentacles to the utmost, fixing the latter, and then contracting the body towards the point of fixture, loosening at the same time its hold with the base, and by reversing these actions, it can retrograde." Dr Roget states that the Hydra can also move from point to point by tumbling heads over heels, that is to say, it can stretch out its tentacles, fix them, and make its body describe a semicircle, or a somerset over to the other side of the fixed tentacles, and it can repeat the process by fixing its base in turn. The most common posture of the Hydra is a pendant one, with the base fixed, and the body floating horizontally, but it also takes great delight in remaining suspended from the surface of the water by the base (or foot) alone, in the manner described by Dr Roget. "When the flat surface of the foot is exposed for a short time to the air above the surface of the water, it becomes dry, and in this state exerts a repulsive action on the liquid, so that when dragged below the level of the surface, by the weight of the body, it still remains uncovered, and occupies the bottom of a cup-shaped hollow in the fluid, thereby receiving a degree of buoyancy sufficient to suspend it at the surface." A dry needle will float in a boat-like hollow on water in the same way. If a drop of water be let fall on the Hydra's foot, the hydrostatic power will cease, and the creature sink.

Dr Johnston observes, that "the Hydra are very voracious." They feed on living animals, such as minute worms, larvæ, &c., which fall within the range of the extended tentacles. "It is (says Baker in his History of Polypi) a fine entertainment to behold the dexterity of a Polype in the mastering of it

way of experiment, I have put a large worm to the very extremity of a single arm (tentacle), which has instantly fastened on it with its little invisible claspers. Then it has afforded me inexpressible pleasure to see the Polype poising and balancing the worm with no less seeming caution and judgment than a skilful angler shows when he perceives a heavy fish at the end of a single hair-line, and fears it should break away. Contracting the arm that holds it by very slow degrees, he brings it within the reach of his other arms, which eagerly clasping round it, and the danger of losing it being over, all the former caution and gentleness is laid aside, and it is pulled to the Polype's mouth with a surprising violence." The extraordinary voracity of the creatures is strikingly shown by their conduct when two Polypes seize on one worm. The stronger sometimes pulls it from the other, but it is not nuusual for both to commence, at different ends, to gorge the prey, and to continue till their mouths meet. "The rest which now ensues (says Dr Johnston) appears to prove that they are sensible of their untoward position, from which they are frequently liberated by the opportune break of the worm, when each obtains his share; but should the prey prove too tough, woe to the unready! The more resolute dilates its mouth to the proper extent, and deliberately swallows his opponent, sometimes partially, so as, however, to compel the discharge of the bait, while at other times the entire Polype is sengulfed! But a Polype is no fitting food for a Polype, and his capacity of endurance saves him from this living tomb, for after a time, when the worm is sucked out of him, the sufferer is disgorged with no other loss than his dinner!" Its escape is somewhat remarkable, because the worms or other prey of the Hydra die so instantaneously, after being seized, that it is generally believed that the creature has the power of ejecting a sort of poison on its prey.

The mode of propagation of the Hydra is truly wonderful. Tubercless or knobs

being seized, that it is generally believed that the creature has the power of ejecting a sort of poison on its prey.

The mode of propagation of the Hydra is truly wonderful. Tubercles or knobs (called technically genmules) spring from the creature's body, and assume in a short time the appearance of perfect Hydræ, which are ultimately separated from the parent by a sort of aloughing. In warm weather, new animals are thus evolved with great rapidity, three or four being sometimes seen adhering to one Hydra, and "what is most extraordinary, the young ones themselves often breed others, and those others sometimes push out a third or fourth generation before the first fall off from the original parent." Let our readers mark this phenomenon, for in this sprouting of one Polype after another from one original, lies the whole mystery of the branching, plant-like appearance and constitution of the Zoophyte order of animals. The propagation of the Hydræ is sometimes carried on by the evolution of tentacles, instead of tubercles from the body, but the issue is the same, the tentacle becoming speedily a distinct and perfect animal. Striking as these circumstances are, the manner in which Hydræ can be multiplied by artificial sections of their bodies, is still more marvellous. "If a Hydra (says Dr Johnston) be cut into four or eight, or even minced into forty pieces, each continues alive and developes a new animal, which is itself capable of multiplication in the same way." Nay, Hydræ made in this manner are always the most prolific. Moreover, sections of the Hydra's body are resoldered immediately, if left connected by a point; and by particular sections you can make monstery, with two or more bodies and one head. "When a

Polype (which word is used synonymously by Dr Johnston, as well as in this paper, with Hydra and Zoophyte) is introduced by the tail into another's body, the two unite, and form one individual; and when a head is lopt off, it may safely be engrafted on the body of any other which may chance to want one. You may slit the animal up, and lay it out flat like a membrane, with impunity; nay, it may be turned inside out, so that the stomachal surface shall become the entangua, and wat continue to live and write. aneous, and yet continue to live and enjoy

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membrane, with impunity; nay, it nay be turned inside out, so that the stomachal surface shall become the cutaneous, and yet continue to live and enjoy itself."

We have been thus particular in describing (with Dr Johnston's aid) the structure and habits of the simplest forms of Hydroid Zoophytes, because from them, owing to their comparatively naked condition, we can best learn the general character of the numerous creatures of the same order that exist in nature, and which work out in it the most wonderful and magnificent effects. Immense numbers—bundreds and thousands—of these Polypes are found in organic union in one tree-like body, or Polypidom, which varies greatly in consistence, being either membranous or cartilaginous, horny or calcareous. Of this latter character are the vast forests of coral which clothe the ocean, or are entombed beneath the soil. It is well known that animal bodies have the power of depositing hard matters, as shell and bone, and a similar power is the source of the coral Polypidoms. At first, the substance of these is always soft and viscid, but gradually hardens into a greater hardness than that of stone. The manner in which the branches of the tree-like Polypidomareformed, is thus described by Dr Johnston. When, as in the propagation of the Hydra, a tubercle or reproductive gemmule is formed, it consists of "two substances, the pulp, and a thin skin or membrane, the latter of which is the germ of the future arborescent Polypidom; by the growth of the pulp, the membrane is distended and moulded into a cell, or pushed upwards in the form of a shoot, in which, after a time, the pulp is arrested in its growth longitudinally, swells out, and is developed into an animated Polype, furnished with tentacula, a mouth, and digestive organs. Bursting the cell at the point which becomes the future aperture, it there displays its organs, and begins the capture of its prey; for, unlike higher organisms, the Polype is at this, the period of its birth, as large and perfect as it ever is at any s

trees are formed, which lay the foundation of continents. At this moment, a new continent, formed by these wonderful artizans, is slowly but surely raising its head above the waters of the Pacific Ocean.

There are, of course, numerous distinctive varieties in the form, colour, and appearance of the Polypidoms of the Zoophyte tribe, as it has been said there are in the state of induration which they assume, through modifications, doubtless, in the proportions of the materials which go to form them, and which the Polypes separate from the matters held in solution in the ocean. The sailors of our own country name some of these Zoophyte productions cocks'-combs, others deadman's fingers, others dead-man's toes, and others sea anemonies. These are of the simpler order of forms, but some Polypidoms rival in beauty the most finely ramified trees of the earth. Beautifully is this shown by the drawings and plates of Mrs Johnston.

The Helianthoida, or anemone-like Zoophytes, though coral-bearing animals in tropical countries, are usually found on the shores of Britain, not in a compound, but in a single state. They resemble truncated cones or short cylinders, seated on plain flat bases, having the mouth in the centre above. Around the mouth the tentacles are disposed like the petals of the Anemone or Marygold, and are sometimes of such bright and lively colours, as to excel these productions of earth in beauty. The creature has its base generally fixed fast to a rock or shell, and when at rest, or unalarmed, has the interior of its body, which is a large bag, filled with water, which makes it like a rounded ball, and enables it to send its tentacles farther abroad for prey. When touched or alarmed, it expels the water in jets through its tentacles, sometimes to the height of a foot, and when emptied, becomes like a piece of blubber covering the rock. We mention this order of Zoophytes, not only because its tribes are the most important of all the coral-bearers in tropical countries, but because specimens of the Heliant

mmon people believe the water they eject to have a sustic, if not a poisonous quality.

common people believe the water they eject to have a caustic, if not a poisonous quality.

Dr Johnston does not hold Sponges to be of the animal kingdom, and he also excludes certain productions called Corallines from the same division of nature's works. For these exclusions he gives excellent reasons, into which it would be a pleasure to follow him. But our space will not permit us to advert farther to this curious subject. What has been said regarding Zoophytes, will lead our readers, it is to be hoped, to inquire further for themselves into the history of these wonderful and plant-like inhabitants of the waters.

#### BILLY WHITE.

PERHAPS Addison was not fully aware how much he was verifying that trite motto of Horace's, "Dulce est desipere in loco," when he set his brains to work to find out, and lay before the public, a dissertation on the beauties of "Chevy Chase;" yet I have known several respectable personages wha, quite satisfied that every thing from that great master's pen must be good, have read the same critique with as great a ratio of pleasurable feelings, as the brother one, on "Para-dise Lost," afforded them. Hoping, therefore, that the generality of my readers may be as purblind as the above-mentioned gentlemen, and with all due sense of my own audacity in following a path my illustrious prototype has trod before me, I beg leave to hand you a few critical remarks on a poem I discovered a few days ago, among my antiquarian researches, which for vastness of design, originality of idea, pathos of sentiment, and pithiness of expression, cannot be excelled, even by the ballads of Homer bound together for the amusement of the Dauphin, or the crying but pious heroes of him of Mantua. This poem is a most exquisite specimen of the Doric; and its effect upon its reader so prodigious, that, to use the language of that learned pedagogue, my good friend Mr Lemuel Longphiz, it can either sublimate the soaring soul above the sublunary system of solidities, or precipitate it to the dismal depths of Dis, darkness, and desperation.

The poem is printed in black-letter, in fine pres and bearing a date so early as 1650; but, alas the author's name is concealed; nor have I, with all my researches, ascertained this important point : its date, however, and a few allusions in the prefa strongly incline me to believe it a translation from the Italian of Dante; the deep horrific spirit it breathes softened down and shaded by the lighter graces of poetry, tends to support this hypothesis.

The poem is entitled "The ryght merry and game-some lyfe and trystefull ileath of Gwylian White, yeleped Billy." Then follows a long preface or proem, and finally comes the poem itself. The first stanzas

" Billy Whyte was a tailor by t And, in truth, he was a natty blade; And he fell in love with one Sall Green, And a beautifuller vench was not never se

In the first verse we ascertain the lowness of our hero's origin, a circumstance which true merit can alone gild or efface; and this fine and original apothegm (my on) is beautifully introduced into the seco by the word "natty," a term which, although now nearly obsolete, is matchless for conciseness and force; ere the great art of the author is displayed. After having read the first line, we naturally set the hero down as a pusillanimous, weak creature, as forming a member of the body corporate of a profession, who appertainers, by the laws of society, are allowed to form but the ninth part of a natural and social creature; with this idea we enter into the second line, when the sudden bursting of the word "natty" on our senses, creates a total revulsion of ideas, and a our senses, creates a total revulsion of ideas, and a complete revolution in the injured Billy's favour. The succeeding distich is simple, elegant, and terse. Billy's tender heart is made captive by Miss S. Green, whose beauty we shall find by and bye is not her only per-

"Now, this Sall Green, as you must know, Loved this here White but very so so; For she was a maid vell warsed in letters, And wery well fit to be this here White's b

And wery well fit to be this here White's betters."

Alas poor White! thy fate was cruel indeed: with all Sally's beauty her high soul disdained a connection where the feast of reason would not preside; her finished education, and constant association with men of literature, had robbed her mind of its feminine softness, and in its lieu imparted a rich soil for cultivation; in short, Sally was a blue-stocking. White probably had never let his studies migrate beyond "Reading made easy," or the "Multiplication Table," and consequently was despised by her he adored. The great beauty of this quadruplet consists in what Quintilian calls the "Demonstrativum," and Dr Blair "The finger-post system:" for example, "this here"

d "this;" it marks the objects very distinctly, a

"Now Billy vent to his shop-board to veep, And vept himself full fast asleep: And in his sleep appeared old Nick— 'Go poison Sally Green with same arsenick.

'Go poison Sally Green with some arsenick."

This verse is quite soul-harassing: irritated by his mistress's taunts and neglects, Billy rushes magnanimously to his shop; he surveys his board with the hatred of despair, as the accursed cause of his misery; then sits down (cross-legged we are to presume) and sinks into Morpheus's arms; but either the uneasiness of his tortured mind, or Turk-like position, produces a dream so singular, that, blinded by his ideas of fatalism, he obeys the voice of the enemy of mankind, like another Sauton Barissa, and prepares to murder the object of his idolatry. There is a good deal of fine poetry in this verse, but the succeeding one is evidently the chef d'œuvre of the whole poem.

"Now, to poison her he was wery, wery loth,

"Now, to poison her he was wery, wery loth.
Yet he mixed it up in some sheep's-head bre
So she drank it all up, as long as she was abl.
And fell, smack dead, right under the table."

And fell, smack dead, right under the table."

This is most exquisite: the sound here is the complete echo of the sense. How fine is the delay pictured by the repetition of the word "wery!" how tender is his care in mixing the deadly drug in a liquor it should seem his victim was partial to! then how awfully imposing the quick harried monesyllables of the third line, betokening the length and depth of the draught; and how agonisingly expressive the word "smack," in the fourth line! We feel, we hear the fall; the dead lumpy weight of the hapless maiden's corpse is present to our view; the empty porringer; the mute despair expressed in the elongated face, extended eyes, and chattering teeth of the conscience-struck Billy. Let us draw a veil o'er this terrible sene: it is more horribly horrifying than the "rueing of the babe unborn" in "Chevy Chase," or the pumpkin nose of Cherubina, in the "Heroine."

"Now Billy he fell fast asleep,

"Now Billy he fell fast asleep,
When, lo! appeared the ghost of a sheep
Said the sheep, 'Bah; with my head
You did poison a beautiful maid.

when, to! appeared the ghost of a sheep. Said the sheep, 'Bah; with my head You did poison a beautiful maid.
Old Nick sent me here to bring you away; So here, 'pon my word, you must no longer stay; So quickly tuck yourself up in your garters, And I'll carry you off on my hind quarters."

After the execution of the foul deed, Billy takes a few drops of a composing draught, and steps into bed; when lo! appears to his astonished sight the ghost of a mutton, in all the composing dignity of head and tail, fore-quarter and hind-quarter, and in the calmest manner reproaches White for the double murder. The simple language of nature, exemplified in the word," is a strong and presumptive proof that the "olden poets" believed in the "Metempsychosis," and that the sheep was only practising a fashionable oath before its infusion into the body of some mincing maccaroni, or birth-night belle. The devil here shows himself no better than he should be, an aider and abettor of suicide; yet there is one exquisite touch of sensibility, in giving Billy his garters, as an instrument of self-destruction; an article of wearing apparel, dear to every life-wearied death-seeking Damon and Phillis, since the days of Sophonisha, and Hansi, the wife of Choary; tothose of her, famous in song and minstrelsy, ycleped "Bailly." With these instruments White tucks himself up, and makes his exit from "this dull mundane orb," replete with sin and wickedness, first putting his legs astride the sheep, who acts the part of a post-horse to carry him to his infernal journey's end.

"Then off they wanished in a flame of fire,

d.

"Then off they wanished in a flame of fire,
Which made all the neighbours wery much to adn
As how they'd not never seen such a sight before,
And they'll not never see such a sight no more."

And they'll not never see such a sight no more."

This is sublimissimum sublimissimorum; every line is Dantean, every semi-demi-syllable terribly terrific; the images of horror in the first line, their effect in the second, and the unprecedented, unexampled, and unfuturable testimony in the third and fourth, are truly magnificent, and would pass the ordeal of the most fiery critic in Europe; all is grand, lofty, sonorous, and intelligible. In the first line we tremble, the next we shake; in the third we have a bad fit of the ague, and the fourth throws us into violent hysterics, from which the gentle anodyne of the "moral," as soft as sighing southern gales, and as effective as sal volatile, comes upon us, and, shedding its witching balm around us, restores our senses and ideas to their former harmony.

balm around us, restores our married,
former harmony.

"Now all ye maids and married,
Take varning by this chap what's dead;
For if he had not never done nobody no wrong.
He might have been here to hear this here song."
This is as refreshing as an ice-cream in July; and here the poet reins in his gloomy imagination, and laying aside the tragic buskin, pours forth as soft and sweet a quadruplet as ever trilled from the pen of Petrarch, or the author of the "Babes in the Wood;" composing and allaying our disordered souls by his magical harmony, and leaving our ideas (like Tony Lumpkin and his mother) in the precise same spot from which we had first commenced our journey. Oh hapless lovers! Oh divine Dante! Oh execrable sheep's head! Oh charming poesy!—From the Kaleidoscope, a Liverpool weekly publication.

THE INVENTOR OF THE IRON PLOUGH. THE INVENTOR OF THE IRON PLOUGH.

Since the beginning of the present century, the wooden plough has very generally been supplanted in Scotland, and in a considerable degree in England, America, and other parts of the world, by a similar implement formed of iron. This change, indeed, is irresistible, as not only is the latter implement more durable, but being lighter more convenient, and less than the latter implement the latt durable, but, being lighter, more convenient, and less liable to go out of order, it produces a great saving in time and labour. We have been informed that the author of this great and sudden improvement upon a nachine which may be said to have continue changed for thousands of years, was William Allan, of Stonehouse, in Lanarkshire, a man of considerable activity of mind, and inventive genius, but in all other respects a simple and unambitious pene the son of a country farrier and smith, and brought up as a farmer. Falling at his father's death into th possession of his tools, he was led, by a natural bent towards the mechanical arts, to attempt various improvements upon the rustic implements which he used. In the winter of 1803-4, he first conceived the daring idea of altering the material of the plough to iron, and with his own hands constructed one of that metal, which he thenceforward used on his own farm. "Wil-liam Allan's Iron Plough" instantly acquired local fame, and people came from all parts of the district to see it. Its celebrity continued to extend, until enlightened persons at a distance heard of it, and were also attracted in considerable numbers to witness its operations. Mr Campbell of Shawfield was the first patron of agricultural improvement who ventured to have one made. He thought it would be a suitable implement for his Highland farms, and requested Allan to make one for him, with the view of having others, if the first should give satisfaction. But Allan, though it the first should give satisfaction. But Allan, though a constant dabbler in iron work, could not allow himself to think so well of his abilities in that line, as to undertake the construction of a plough for so great a man as Mr Campbell; and he recommended that Mr Gray, a respectable blacksmith at the neighbouring village of Uddingston, should be employed to execute the iob.

Gray, a respectable blacksmith at the neighbouring village of Uddingston, should be employed to execute the job.

Gray accordingly made an iron plough for Mr-Campbell, under the directions of the inventor; and the article being found satisfactory, he was immediately employed to make others. Ere long, orders came so fast upon him for iron ploughs, that, not having sufficient capital for his increased business, he was obliged to take in a monied partner. For some time the manufacture of iron ploughs was limited to this little village; but at length other artificers throughout the kingdom ventured to make them too, and, in time, they were found universally diffused. As might be expected, several improvements were made upon the first comparatively rude attempt of William Allan; but the principle in all cases remained unaltered. In the mean time, while so many were profiting by the manufacture of the article, and while the whole nation was a gainer by its economy and durability, the simple inventor remained in his obscurity, contented with the reflection that he had done his country some service.

The public will not learn, without feelings of concern and regret, that this worthy and unassuming man, now eighty-six years of age, is declining into the infirmities almost inseparable from his time of life, without those comforts which years such as his so greatly require. About twelve years ago, he left a farm which he had lost considerable sums by bad harvests; and retired to a very small patrimony which he possesses in the immediate neighbourhood of Bellshill, a

which he had lost considerable sums by bad harvests; and retired to a very small patrimony which he possesses in the immediate neighbourhood of Bellshill, a few miles to the east of Glasgow. With an aged and infirm sister dependent upon him, he has here gradually declined in fortune, until his whole property has become bonded or mortgaged to its full value, and he is in dread of being sent abroad into the world, without a home or a friend. We make his case known, in the hope that it may make its proper impression on those associations which have for their object the promotion and reward of agricultural improvements.

AMERICAN STAGE-COACH DIALOGUE.

In the middle of the day, as we were driving past a house on the road-side (United States), a female suddenly threw up one of the windows, and bawled out, "You can't give me a seat in the stage?" "Yes, mistress, I guess I can," cried the driver, pulling up his horses. "Well, then, let us aboard," said she, hurrying towards us, with a trunk in her hand; "it's most almighty hot." "I think as how you'll feel it hotter when we get a going," replied the driver; "there's a craft of folks inside to-day." "Oh!" returned she, "I guess, once we're started, we'll go as regular as a tea-party." Having seated herself, she proceeded to arrange her luggage, and seemed particularly anxious to preserve from accident a large bottle, which was fastened on the top ofter trunk. "Well, now, Mister, said she to me, "don't put your feet ages my trunk; for if you don't take care on my bottle, you'll be breaking on't. I've been sick on this road this fortnight. Dr S—raised me last week: he's a dreadful clever man; and said, if I didn't begin takin' on wine, I should new; get smart; and this is my bottle of wine. Now, you, Mister, keep back your feet, or you'll be breaking on t."—Howison's Sketches.

THE MOCKING-BIRD.

THE MOCKING-BIRD.

This plumage of the Mocking-Bird, though none of the homeliest, has nothing gaudy or brilliant in it; and had he nothing else to recommend him, would scarcely entitle him to notice, but his figure is well proportioned, and even handsome. The case, elegance, and rapidity of his movements, the animation of his eye, and the intelligence he displays in listening, and laying up lessons from almost every species of the feathered creation within his hearing, are really surprising, and mark the peculiarity of his genius. To these qualities we may add that of a voice fall, strong, and musical, and capable of almost every modulation, from the clear mellow tones of the Wood Thrush, to the savage scream of the Bald Eagle. In the measure and accent, he faithfully follows his originals. In force and sweetness of expression, he greatly improves upon them. In his native groves, mounted on the top of a tall bush or half-grown tree, in the dawn of dewy morning, while the woods are already vocal with a multitude of warblers, his admirable song rises pre-eminent over every competitor. The car can listen to his music alone, to which that of the others seems a mere accompaniment. Neither is this strain altogether imitative. His own native notes, which are easily distinguishable by such as are well acquainted with those of our various song birds, are bold and full, and varied scemingly beyond all limits. They consist of short expressions of two, three, or at the most five or six syllables, generally interspersed with imitations, and all of them uttered with great emphasis and rapidity, and continued with undiminished ardour for half an hour, or an hour, at a time. His expanded wings and tail glistening with white, and the buoyant galety of his action arresting the eye, as his song swells or diseaway; and, as my friend Mr Bartram has beautifully expressed it, "He bounds aloft with the celerity of an arrow, as if to recover or recal his very soul, expired in the last elevated strain." While exerting himself, a bystan

seems to triumph in their defeat by redoubling his exertions.

This excessive fondness for variety, however, in the opinion of some, injures his song. His elevated imitations of the Brown Thrush are frequently interrupted by the crowing of cocks; and the warblings of the Bluebird, which he exquisitely manages, are mingled with the screamings of swallows, or the cackling of hens; amidst the simple melody of the Robin, we are suddenly surprised by the shrill reiterations of the Whip-poor-will; while the notes of the Killdeer, Blue Jay, Martin, and twenty others, succeed with such imposing reality, that we look round for the originals, and discover, with astonishment, that the sole performer in this singular concert is the admirable bird now before us. During this exhibition of his powers, he spreads his wings, expands his tail, and throws himself around the cage in all the cextacy of enthusiasm, seeming not only to sing, but to dance, keeping time to the measure of his music. Both in his native and domesticated state, during the solemn stillness of night, as soon as the moon rises in silent majesty, he begins his delightful solo, and serenades us the livelong night with a full display of his vocal powers, making the whole neighbourhood ring with his inimitable medley.—Wilsen's American Ornithology.

DO AS I DO, MEITHER MORE NOR LESS.

The Pope once stopping for the night in a small village of Italy, the inhabitants resolved to send him a deputation. The mayor also suggested to present his holiness with the chief produce of the country, consisting of pine-apples, figs, and cream. The pine-apples, however, were dispensed with, and each member was to carry figs and cream in silver basins. "Now," said the mayor, with all the gravity of office, "you are not accustomed to appear before these high personages, therefore let us have no nonsense; do what you see me do, seither more nor less." The deputation was arranged accordingly. The mayor placed himself majestically and magisterially at its head, armed, like his followers, with a basin of figs in his left hand, and of cream in the right. At this time it was the custom to wear beards. The door opened, and the mayor repeated his caution, "Neither more nor less, I beseech you." There was a step down into the room, but the mayor not thinking of it, the shock plunged his beard and face into the cream-basin, and not being very young, brought him upon his knees, with his hands and basin under him, and his creamed face (richly ornamented with a well-lathered and dripping beard) as it were imploringly raised towards the representative of St Peter. The Cor-

poration thinking this a grave matter of form, simultaneously ducked their bearded faces, prostrated themselves on their marrow-bones, and significantly cast a half-inquiring and confident look at their leader, as though to asy, "You see we are all right." The Pope was at first (and well he might be) astounded; but burst into as genuine a fit of laughter as his lowest menial could have indulged in; while his officers, conceiving that the addressers meant merely to humbug his high mightiness, gathered up the figs, and pelted the Body Corporate most lustily. The mayor hobbled out of the room as fast as he could-closely followed by his brethren, one of whom whispered him, "How lucky we did not bring the pine-apples; they would have battered our heads to a mummy."—Scrapbook.

### NEW THEORY OF THE HEART.

"The heart has been elevated to a place in general esteem to which it is by no means entitled. "The heart is nothing more or less than a kind of force pump to propel the blood through the system, somewhallike a set of city water-works,"—Chambers's Journal No. 338.

No. 338.

When old Galileo first publish'd his system,
A set of old gentlemen strove to resist him;
Like soap-bells their arguments melted in air;
But the dungeon was deep, and the sage immured th
The doctrine was startling, heretical, new,
But Time with his touchstone has proved it all true.
My motto is startling, and somewhat like mystery,
But its truth I shall prove by referring to history.

That royal virago, "enthroned by the west,"
By Raleigh bepraised, and by Essex caressed,
Who gave British civilisation a shock,
Sending one to the Tower, and one to the block;
And, determined her whims and caprices to vary,
Embrued her white hands in the blood of poor Mary;
Whose matin refection was steaks from the rump—
She had not a heart, but a royal force-pump!

King Jamie the Seot, her successor and brother,
He fawned on the shrew, though she murdered his mother
Gave countless but quiet enormities birth,
Though he held himself heaven's vieegerent on earth,
And squandered the nation's finances on minions,
Who flattered his humour, and backed his opinions;
So at once to this truthful conclusion I jump—
He had not a heart, but a patent force-pump!

His son, whom Old Noll on the battle-field baffled, Atoned for his Star-Chamber crimes on the scaffold: But, sympathy, feeling, and sorrow apart, If truth must be spoken, he had not a heart; Though I hold in abhorrence the doom of the Rump-The "martyr" had only a royal force-pump!

The "martyr" had only a royal force-pump!

When Charles his son was brought back from the Hag
He solemnly swore to the "National League;"
But his oaths were engraven on water, not stone,
So he sabred the lieges who buttress'd his throne;
Ungrateful, capricious, licentious, and mean,
Despised in his harem, and loathed by his queen;
A vassal of Louis, he truckled and sold
His influence, such as it was, for French gold;
So his memory resembles an old rotten stump—
He had not a heart, but a carious force-pump!

He had not a heart, but a carious force-pump!
That essence of selfishness, rancour, and pride,
of worldliness, meanness, with genius allied;
A dignified churchman at war with the world,
Who from his foul armoury poisoned shafts hurled
At gentleness, beauty, the loves, and the graces,
Nay, thunder-bolts launched at his foes in high places
Say, where is the right-minded man in the nation
Can read his memoirs, and suppress indignation?
Vanessa the tender, and Stella\* the bright,
Both sickened and died for this clerical fright,
This Dean of St Patrick's—who shed not a tear
O'er their beautiful ruins, when laid on the bier:
He was of the "earth, carthy," a base-minded lump,
He had not a heart, but a rotten force-promp!
The Twickenham bard immortality wer.

He had not a nears, but a rotten love-pylinp:

The Twickenham bard immortality wer,

He blazed o'er his age like a tropi'al ym;

And beauty, and fashion, and royalty vied

With the masses of mankind to flatter his pride;

And fortune and elegance furnished his table;

But his little force-pump was sa hard as a pebble

When incense was offered spontaneous and free,

He kicked down the censer, and eke devotee;

He cruelly, basely, lampooned Lady Mary,†

Because in opinion they happened to vary;

\*In consequence of the cruel and unaccountable conduct of Swift, Vanessa, alias Miss Vanhomrigh, was seized with a delirious fever, and died in resentment and despair. In like manner, Stella, or Mrs Johnson, died of a lingering decline, four years after the death of Miss Vanhomrigh. "Thus perished these two innocent, warm-hearted, and accomplished women, so rich in all the graces of their sex; so formed to love and to be beloved, to bless and to be blessed; sacrifices to the demoniae pride of the man they had loved and trusted. But it will be said, "Si elles n'avaient point aimé, elles seraient moins connues: 'they have become immortal by their connection with genius; they are celebrated merely through their attachment to a celebrated man. But oh, what an immortality! won by what martyrdom of the heart! And what celebrity! not that with which the poet's love, and his diviner verse, crown the deified object of his homage, but a celebrity purchased with their life-blood and their tears!"—Mrs Jameson's Romance of Biography, vol. il. p. 240.

† "You shall see (said Lady Mary Wortley Montague, referring to Pope's Letters) what a goddess he made of me in some of them, though he makes such a devil of me in his writings afterwards, without any reason that I know of."—Spence.

Though erst he adored her as nymph and as goddes And retained as a relic the string of her boddice;\* By virulence prompted, at length he despised her, And—shameful to letters!—the bard satirised her. His gallantry, sure, must have lodged in his hump; For he had not a heart, but a crooked force-pump!

For he had not a heart, but a crooked force-pump!
But patience, alas—ingenuity—time
Would fail the poor poet to hitch in his rhyme
One tythe of the deeds of the "historical heartless—
Besides that the Muse thinks it is not her part less
To sing how poor Chatterton, Otway, Kirke White,
Burns, Lovelace, Keats, Butler—all children of light—
Whom, e'en for its own sake, the world should have
cherisbed,
In the midst of their days and celebrity, perished,
From want, or from noble or critical malice,
While dunces have often been lodged in a palace.
So she sings, like Northumbria's bard, "in the dumps,"†
For men have not hearts, but a set of force-pumps.
D. Vender.

\*"In vain fair Thames reflects the double scenes,
Of hanging mountains and of sloping greens;
Joy lives not here—to happier seats it flies,
And only dwells where Wortley casts her eyes."
"These sweet and musical lines, which fall on the ear
with such a lulling harmony, are dashed with discord
when we remember that the same woman who inspired
them was afterwards malignantly and coarsely designated
as the Sappho of his satires. The generous heart never
coolly degraded and insulted what it has once loved;
but Pope could not be magnanimous—it was not in his
spiteful nature to forgive."—Romance of Biography,
vol. ii. p. 300.

† The unknown author of "Fact Town."

† The unknown author of "Earl Percy" thus singeth:
"For Widdrington I must bewail,
Like one in doleful dumps."

STORY OF A STRAYED CHILD.

On the 24th April [1821], William Roan, labourer, went out to cut peat on a moss near the summit of the hill of Lowrin, a very high, remote, and solitary place, near New Galloway. He took his son along with him, a little boy of about four years of age. After having been employed for a short time, he missed the child, who had been expected the state of th Lowrin, a very high, remote, and solitary place, near New Galloway. He took his son along with him, a little boy of about four years of age. After having been employed for a short time, he missed the child, who had been amusing himself in chasing a kid which he had found on the hill; and he became alarmed lest he should have fallen into one of the many moss-pits, or quagmires, or stumbled over some of the rocks or precipices, with which the place abounds. No trace of the boy, however, could be found. In vain did he call upon his name, for no answer was returned. The anxiety of the father led him, from place to place with the utmost rapidity, sometimes finding the prints of his son's little feet in the soft parts of the moss; but he never dreamed of crossing a high stone wall, or dyke, which runs on the south side of the moss alluded to, down the steep and rocky side of the moss alluded to, down the steep and rocky side of the most alluded to, be the margin of the Dee, which flows on one side, and Loch Ken on the other. Over this dyke he conceived it impossible for a child to climb. In the evening he found means to send to New Galloway an account of the circumstance; and several humane persons, accompanied by the distracted mother, came to aid his search for the poor child in this wild and rocky moor? One of them happened to cross over the stone wall alluded to; perceived, there, the impression of the boy's footsteps, and these were occasionally traced all the way down to the margin of the Dee, where they lost all trace of the unfortunate little wanderer, and were filled with the most painful apprehensions that he must have been carried off by the stream. Going along its banks, and crossing dykes and steeps, which they conceived it almost impossible the child could have climbed, they again found the print of his naked feet on the soft sand of a small rivulet; and by applying a measure which they again found the print of his naked feet on the soft sand of a small rivulet; and by applying a measure which they face

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